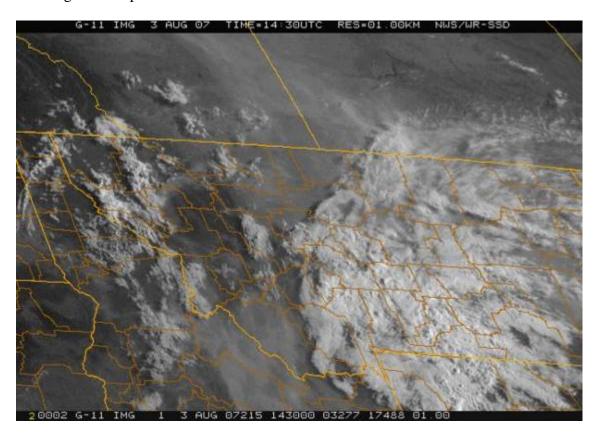
# Montana DEQ Forest Fire Smoke Advisory August 03 2007 10:00 AM Friday

## **Current Situation**

A westerly push has cleared the sky over the northwestern corner of the state up to line between the Brush Creek and Chippy Creek fires west of the Flathead Valley. Conditions in the south part of the Flathead are much improved over yesterday's smoke levels. Ronan has improved to MODERATE and but Polson is still at UNHEALTHY FOR SENSITIVE at the moment. Whitefish, Kalispell and Missoula are all at UNHEALTHY levels this morning due to their close proximity to several active fires. Smoke from the fires in and near the Front Range has that area socked in this morning with **UNHEALTHY FOR SENSITIVE** readings in Cut Bank, Choteau, and Augusta. Great Falls is seeing MODERATE smoke levels today. Hamilton and Butte are still stuck in **UNHEALTY FOR SENSITVE** this morning mostly due to smoke from the fires in Idaho. Helena and Baker have been seeing MODERATE conditions this morning. Smoke levels in the immediate vicinity of the active fires are expected to be UNHEALTHY or worse, especially in the Clark Fork Valley near Clinton. The Northern Flathead will likely see strong smoke impacts locally today but Missoula could see substantial improvement as a weak cold front heads into the state. Local plume impacts along the Front Range could be severe later today. See the forecast below for details. Residents near active fires or experiencing noticeable smoke levels should use the VISIBILITY GUIDELINES to determine smoke levels in their area and guide their activity decisions.

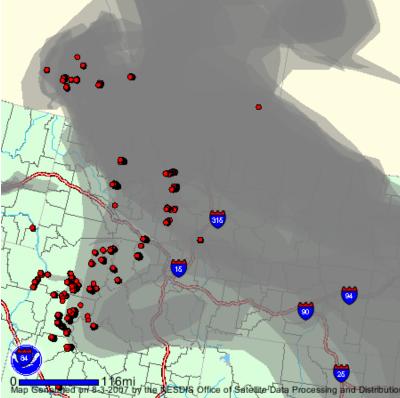
Morning satellite photo centered on Great Falls:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed

smoke is based on yesterday's satellite coverage, the fire detects are based on last nights

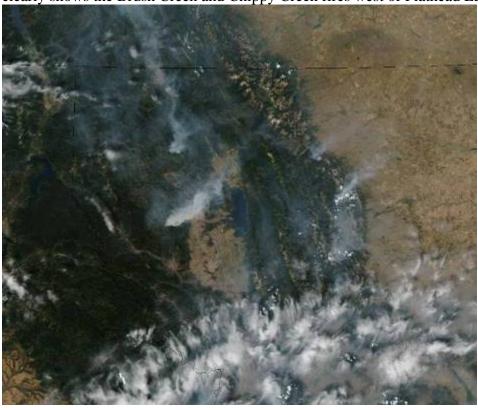
satellite coverage).



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here: <a href="http://activefiremaps.fs.fed.us/lg\_fire2.php">http://activefiremaps.fs.fed.us/lg\_fire2.php</a>

This MODIS satellite photo below was taken at 2:11 PM yesterday August 2<sup>nd</sup> and clearly shows the Brush Creek and Chippy Creek fires west of Flathead Lake.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

## Updated 10 AM August 03, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

HAZARDOUS	
VERY UNHEALTHY	
UNHEALTHY	Whitefish T24
	Kalispell T24
	Missoula T24
UNHEALTHY	Polson T24
FOR SENSITIVE GROUPS	Hamilton T24
	Butte T24
	Cut Bank Vis(2)
	Choteau T8
	Augusta T8
<u>MODERATE</u>	Ronan T24
	Helena T24
	Great Falls Vis(1)
	Baker Vis(1)

T1(x) One-hour TEOM or BAM value (number of values)
T8(x) Eight-hour average TEOM or BAM value(number of values)

T24 24 hour average TEOM or BAM value Vis(x) Visibility value(number of hours)

Vis(am/pm) Visibility value from twice/day reporting stations

(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local <u>visibility guidelines</u> to evaluate possible health risks and make informed activity decisions.

#### **Forecast**

Lower smoke production yesterday, a steady westerly flow, low clouds, and a weak frontal passage should bring substantial improvement to many of the areas severely impacted yesterday. Missoula will be upwind of most smoke and should look pretty good by afternoon as the westerly winds kick in. Helena should see improvement as well and the general haze over the entire state should thin out through the day. The exception will be those areas downwind of the active fires today and this evening as the fire weather forecast indicates a strong likelihood of very intense plumes stretching out to the east of the fires later today. These plumes will not spread much laterally until late tonight and communities in the center line of these plumes could see very severe impacts. The dispersion this afternoon should be excellent and with good transport winds a lot of the residual smoke could be exiting the state for good by tomorrow. This will produce the improved general haziness. There will be some intermittent smoke impacts under the smoke aloft later this morning as the smoke mixes down. Direct plume impacts will be

problem later today for many areas. Residents need to pay close attention to conditions in their area and use the <u>visibility guidelines</u> to guide their activity decisions as the situation changes.

## John Coefield

Meteorologist

Montana Department of Environmental Quality